

## **ABSTRACT**

In some illustrative embodiments, an IP-layer based network selection and multihoming method is provided that enables a flexible and secure dynamic selection of one or more serving networks for use by a client node. The method is independent of any link-layer technology. A serving network can be an ISP network, a NAP network exchange facility, a VLAN, or the like. Network information is advertised to a client node, the client node is authenticated and authorized for use of an access router, and a secure tunnel is established between the client node and the access router. The method can be implemented by using standard protocols, and can work over any existing or future link-layer technologies that are able to carry IP datagrams, without any modification.